

mentlich an der Wurzel, glänzend und fein punktiert. Die Fortsätze schliessen hinten zusammen und bedecken den After völlig. Ihre scharfen Spitzen neigen sich hakenförmig nach unten. Die Länge der Fortsätze entspricht etwa der des Pygidium samt der halben Länge des vorletzten sichtbaren Dorsalsegments. Biegt man bei dem vorliegenden Spiritussexemplar die Fortsätze zurück, so sieht man den Endtheil des verborgenen 7. Segments mit horniger Dorsalplatte, welche ein kleines queres Stigma trägt und stärker punktiert ist. Darunter liegt der herausgestülpte After und wieder tiefer in gleicher Höhe etwa, die häutigen Stachelsheiden. Die Oberflächen der Dorsal- wie der Ventralsegmente sind spiegelnd glatt und haben eine äusserst feine zerstreute Punktiertung. Alle Füsse haben 5 Tarsenglieder. Bei dem an einem Mittelfusse erhaltenen Klauengliede ist dieses so lang als die beiden vorletzten Tarsenglieder. Die Klaue sind klein, gebogen und einfach ohne Zähne. Das erste Tarsenglied der Vorderfüsse ist innen ausgerandet, der grössere Sporn dick, die grösseren Sporne der Mittel- und Hinterfüsse lang ohne Auszeichnung. Die Färbung des Thieres ist dunkel kastanienbraun, am Bauche, namentlich nach hinten zu heller.

Fnndort : Salisbury. Maschunaland.

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## Descriptions of New Genera and Species of Hymenoptera from India.

By P. Cameron.

(Continued.)

### W. Cryptini.

#### 13. *Hedycryptus* gen. nov.

Median segment stoutly spined; there is a complete basal transverse keel and a short one in the middle behind it; there is a distinct, somewhat triangular depression behind it; the spiracles are linear. Antennae long, slender, broadly ringed with white; the 3rd joint is distinctly longer than the 4th. Clypeus broadly rounded. Labrum projecting; its apex rounded. Radial cellule elongate. Arolet small, narrowed above. Cubito-discal nervure broadly rounded and without the stump of a nervure. Transverse median nervure in hind wings broken half way between the middle and bottom. Petiole slender, but with the post-petiole distinctly wider than the rest; the

spiracles on the 2<sup>nd</sup> segment are placed near the middle; on the 3<sup>rd</sup> at the apex of the basal third of the segment.

The head is obliquely narrowed behind the eyes, and is not much developed there; the malar space is of moderate length. The legs are long and slender: the hinder tibiae are spinose; the tarsi are more thickly spined; the apex of the 4<sup>th</sup> joint is incised; they are broadly ringed with white. The abdomen is not marked with white.

In *Ashmead's* Arrangement (Bull. U. S. Nat. Mus. XXIII, p. 43) this genus would come in near the American genus *Calliocryptus*, with which, however, it cannot be very well confounded.

### *H. filicornis* sp. nov. ♀

Length 13—14 mm; ovipositor 5 mm.

Hab. Sikkim.

Antennae slender, black, the scape and the 5—8 joints white beneath. Head black, the orbits, the face, clypeus and basal half of mandibles, yellow; the apex of the clypeus and the top, except in the centre, black. The part below the ocelli obliquely, irregularly striated; the face broadly projects and has its apex obliquely depressed. Thorax opaque; the pleurae more or less striated; the meta- with the striae more widely striated and curved. The edge of the pronotum, a line on the lower edge of the propleurae, the tubercles and the tegulae are yellow. Pleurae and median segment thickly covered with silvery pubescence. There is a distinct, oblique keel before the middle of the propleurae. The spines on the median segment are broad, leaf-like, shining and are rounded at the apex. The fore coxae are yellowish, broadly lined with black in the middle on the outerside: their trochanters are yellowish; the middle coxae are black with the apical half pale yellow on the lower side: their trochanters yellow, marked with black above; the hinder coxae and trochanters black; the fore legs are paler, more yellowish in tint than the posterior: the basal two thirds of the basal joint of the hinder tarsi black: the remainder white. Abdomen ferruginous: the petiole, except at the apex, the greater part of the 2<sup>nd</sup> segment above and the base of the 3<sup>rd</sup> segment above, black.

### 14. *Plesiocryptus*, gen. nov.

Inner orbits projecting beyond the eyes as a stout ridge: the front between them deeply depressed. Clypeus roundly convex, distinctly projecting beyond the face, which roundly projects in the middle above. Labrum obliquely projecting;

its apex broadly rounded. Median segment closely rugose, with 2 transverse keels and with distinct apical teeth; the spiracles are large, linear. Areolet wide at the top; the disco-cubital nervure has the stump of a nervure, the transverse basal nervure is broken distinctly below the middle in the hind wings. Post-petiole large and distinctly widened. Legs normal; the tarsi thickly spinose.

The parapsidal furrows extend to shortly beyond the middle; the scutellum is roundly convex: the head is not much developed behind the eyes and is obliquely narrowed there. The median segment is closely rugosely punctured; the space between the two keels is longitudinally striated; the areola is only defined posteriorly; the two bounding keels do not extend to the base of the segment. The abdominal segments are smooth, the basal segments slightly shagreened; the spiracles of the 2nd segment are placed near the middle; the metapleural keel is obsolete.

If it were not for the very distinctive character afforded by the prominent keels on the sides of the front, the type of this genus might be referred to *Cryptus*.

**P. carinifrons, sp. nov. ♀.**

*Niger; pedibus rufis; coaxis, trochanteribus, tibiis, tarsis posticis nigris; alis hyalinis; nervis stigmatisque nigris.* — Long: 9; terebra 3 mm.

Hab. Simla. (Nurse).

The inner orbits, the outer from the top and a line on the malar space, yellow; the apex of the clypeus is of a more obscure yellow; the labrum is testaceous. The face is closely, the clypeus more sparsely, punctured; the front above is somewhat strongly obliquely striated. Mesonotum closely and strongly shagreened; the scutellum is almost smooth and very shining. Median segment closely rugosely punctured; the middle irregularly longitudinally striated. Pleurae closely rugosely punctured; the meta- more coarsely than the rest. Legs rufous; the coxae, trochanters and the hinder tibiae and tarsi black. Abdomen shining; the 2nd and 3rd segments slightly aciculated.

*Cryptus verticalis* Bingham and *C. praepes* Bing.

These two species (described Ann. and Mag. Nat. Hist. December 1895 pp. 444—445 from the Phillipines) cannot be referred to *Cryptus* or even to the *Cryptini*. The presence of longitudinal keels on the median segment separates them from the latter tribe. They probably belong to some genus

of the *Phygadeuonini* or *Hemitelini*, both of which have longitudinal and transverse keels, as have the two Phillipine species.

### V. Mesostenini.

#### 15. *Suvalta* gen. nov.

Front armed with a sharp spine. Arolet small, square. Median segment rugosely punctured, at the base with a transverse curved keel; the sides with a spine; the spiracles large, linear. Post-petiole large, broad; the apex fully 3 times the width of the base. Eyes large, oval, parallel, below reaching to the clypeal foveae. Clypeus roundly convex, not separated from the face. Labrum large, projecting. Mandibles short, curved, armed with 2 subequal teeth. Occiput transverse, margined. Temples only very slightly developed. Thorax long, transverse at the base; the parapsidal furrows distinct. Scutellum convex. Median segment large, with one transverse keel. Mesosternum bordered laterally by a deep furrow. Arolet small; the transverse median nervure is received behind the transverse basal. Legs long; the fore tarsi twice the length of the tibiae; the hind coxae large, reaching almost to the apex of the abdomen. Petiole longer than the 2nd segment; its basal half much widened; the spiracles placed near the base of the post-petiole; the segments are closely punctured; there is a smooth depression on either side at the base (gastrocoeli). There are 8 dorsal segments; the last is bluntly pointed; the ventral keel is large on the 3rd and 4th segments.

The antennae are long and are annulated with white; the tarsi are thickly spined; the incision at the base of the anterior is deep; the base of the pronotum is tuberculate on the outer side and the edges may form teeth; the apex of the median segment has a straight oblique slope; the pleural tubercles are large; and the hinder legs are longer than usual. The claws are large.

The presence of parapsidal furrows, of a furrow on the mesoplenrae, the structure of the median segment, the small square arolet refer this genus to the *Mesostenini*. The form of the petiole is more like what we find in the *Platyuri* section of the *Ichneumones* than in the *Cryptini*. It comes near to the American genus *Polycyrtus*.

The 2 Indian species may be separated thus:

— Front and vertex smooth, neither punctured nor striated; the apex of the scutellum and the post-scutellum black, the stigma and nervures black.

*laevifrons.*

— Front and vertex striolated; the apex of the scutellum and post-scutellum yellow; the stigma and nervures testaceous.

*rugifrons.*

1. *S. laevifrons*, sp. nov. ♀.

*Nigra; facie, ore, orbitis oculorum, maculis thoracis, basi scutelli flavis; pedibus anterioribus pallide flavis; basi coxarum anteriorum nigra, posticis nigris, albomaculatis; femoribus posticis late fulcis; alis hyalinis, nervis stigmatisque nigris.* — Long: 15 mm.

Hab. Khasia Hills (Coll. Rothney).

2. *S. rugifrons*, sp. nov.

Long. 10 mm.

Hab. Khasia Hills (Coll. Rothney).

Antennae black, the middle banded with white; the scape shining, almost bare. Face, clypeus, mandibles, the upper orbits narrowly, and the lower on the outer side more broadly, yellow. The face and clypeus strongly punctured and sparsely covered with short white hair; the black part of the front, from behind the ocelli, strongly, irregularly and mostly longitudinally striated; the apex of the clypeus is broadly black, the black mark being somewhat triangularly narrowed in the middle; the apices of the mandibles black. Thorax black; a mark on the base of the pronotum, broad at the base, obliquely narrowed at the apex, the tegulae, tubercles, the greater part of the scutellum, a mark on the post-scutellum, 2 large marks on the apex of the median segment — narrowed at the base and apex — the teeth, the lower part of the propleurae, a large mark — broader than long and oblique at the apex — on the lower side of the mesopleurae and a smaller, irregular mark under the hinder wings, yellow. Mesonotum strongly punctured, reticulated in the middle; the scutellar depression wide and deep; the scutellum punctured, raised, rounded equally at the base and apex and covered with long white hair; the post-scutellum is smooth, shining and deeply bifoeteate at the base. The median segment has a stout keel, curved backward, near the base; behind this in the middle are 2 curved keels, between which it is coarsely aciculated; the middle has some large, deep punctures and near the transverse keel are some short striae; in front of the keel the segment is coarsely rugosely reticulated. The upper part of the pronotum is strongly, but not closely, the base finely and closely punctured; the intermediate space strongly obliquely striated. Mesopleurae strongly and closely punctured, running

into reticulations and striations; the metapleurae strongly and closely punctured; the oblique furrow at the base is deep. The 4 anterior legs are fulvous, their coxae and trochanters yellowish-white; the coxae, the apices of the femora broadly and the base of the metatarsus narrowly, black; the hinder spurs blackish. Abdomen black, the segments yellowish laterally on the apex; the yellow band on the petiole is larger and more triangular; the 2<sup>nd</sup> and following segments are closely punctured; the gastrocoeli shallow, the apex shagreened, the base triangularly raised.

## VI. *Pimplini.*

### *Coleocentrus Möllerii* Bingham.

This species appears to me to be a *Rhyssa*. It does not seem to have, judging from the figures, the characteristics of the *Acoenitini*, the tribe to which *Coleocentrus* belongs. The abdomen of *C. Möllerii* is identical with that of *Rhyssa* and the *Pimplini*, and does not have the large plough-share-shaped hypopygium of the *Acoenitini*. It, moreover, has the transversely striated mesonotum of *Rhyssa*. Cf. Bingham, Journ. Bomb. Nat. Hist. Soc. 1898 p. 116.

### 16. *Trichopimpla*, gen. nov.

Head and thorax densely hairy. Claws pectinated. Median segment without a keel and depressed in the middle at the base. Clypeus roundly convex; its apex depressed, rounded. Arolet narrowed at the top, the nervures uniting there; the transverse median nervure is received distinctly in front of the transverse basal; there is no stump of a nerve on the disco-cubital; in the hind wings the transverse median nervure is broken in the middle. Legs moderate in length; the fore tibiae attenuated at the base. The 2<sup>nd</sup> and following segments of the abdomen are smooth impunctate and without lateral or oblique depressions. Ovipositor projecting; the hypopygium cultriform, broad at the base. The temples are not broad, the occiput is margined; the malar space is moderate; the mandibles broad, bidentate at the apex. All the abdominal segments are longer than broad; the 3<sup>rd</sup> joint of the antennae is nearly twice the length of the 4<sup>th</sup>.

The cultriform, prominent ventral valve would refer this genus to the *Acoenitini*, but the legs are not longish, nor the femora stout as in that group; the legs in fact are, if any thing, shorter, and certainly more slenderly built, than in most species of *Pimpla*, from which it further differs in the com-

plete absence of depressions on the abdominal segments. It cannot be referred to the *Lissonotini* with one genus of which (*Arenetra*) it agrees in having a hairy body; but *Arenetra* differs, *inter alia*, in the claws not being combed.

**T. pilosa, sp. nov. ♀.**

*Nigra; pedibus rufis; coxis, trochanteribus, tarsis posticis nigris; alis hyalinis, stigmate nervisque nigris.* — Long. 8, terebra 2 mm.

Hab. Simla.

Antennae not quite so long as the body; the scape covered with fuscous hair. Front closely punctured, the centre indistinctly transversely striated; the vertex closely punctured in the centre, more sparsely on the sides; the face is closely rugosely punctured; the clypeus is less closely and strongly punctured and is more shining. The inner orbits in the middle narrowly and the apical third of the clypeus are rufous. Mandibles and palpi black; the teeth are rufous. The upper part of the thorax is closely and uniformly punctured; the median segment, if any thing, more strongly than the mesonotum; the apex of the median segment is more coarsely punctured than the base. Pleurae and sternum closely and distinctly punctured. The head and thorax are densely covered with longish pale hair. Legs rufous; the coxae, trochanters, hinder knees and tarsi black; the coxae and trochanters are thickly covered with long white hair. Wings clear hyaline; the nervures and stigma black. Petiole closely and distinctly punctured; the middle finely transversely striated; the apex smooth and shining; the 2nd segment is closely minutely transversely striated, except at the apex; this is also the case with the 3rd but more feebly; the other segments are smooth and shining. The basal segment is, especially at the base, thickly covered with long white hair.

**VII. Ophionini.**

**17. Delopia, gen. nov.**

Metathoracic spiracles about 3 times longer than broad. Scutellum not much raised, broader than long, its sides depressed, keeled on the outer edge. Median segment with longitudinal keels, which form areae on the sides; the areola is open at the apex. Areolet shortly appendiculated; the transverse median nervure is received shortly in front of the transverse basal.

(To be continued.)